

## Kingman County

### Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

6/11/2018

Using the most recent IMPLAN data available (2016) adjusted for 2018, 17 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Kingman County economy.<sup>1</sup>

These 17 sectors have a total direct output of approximately **\$122.8 million** and support **866 jobs** in Kingman County. Running the model for all 17 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Kingman County Economy						
Impact Type <sup>2</sup>	Employment	% Employment	Total Value Added <sup>3</sup>	Total Value Added % of Gross Regional Product <sup>4</sup>	Output <sup>5</sup>	Output % of Gross Regional Product
Direct Effect	866.3	17.12%	\$23,853,664	8.99%	\$122,755,972	46.25%
Indirect Effect	176.0	3.48%	\$8,746,874	3.30%	\$18,082,339	6.81%
Induced Effect	22.4	0.44%	\$1,381,776	0.52%	\$2,592,961	0.98%
<b>Total Effect</b>	<b>1064.6</b>	<b>21.04%</b>	<b>\$33,982,314</b>	<b>12.80%</b>	<b>\$143,431,272</b>	<b>54.04%</b>

As shown in the above table, agriculture, food, and food processing sectors support **1,065 jobs**, or **21.04%** of the entire workforce in the county. These sectors provide a total economic contribution of approximately **\$143.4 million**, roughly **54.04% of the economy**.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 17 agriculture, food, and food processing sectors is approximately **\$34.0 million**, or **12.80% of the GRP**. This indicates that personal income, business income, and taxes generated by these sectors account for **12.80% of the total economy**.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

<sup>1</sup> Article on building a contribution analysis in IMPLAN that avoids double counting:

[http://www.implan.com/index.php?option=com\\_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70](http://www.implan.com/index.php?option=com_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70)

<sup>2</sup> Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

<sup>3</sup> Value added = labor income + indirect business taxes + other property type income.

<sup>4</sup> GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

<sup>5</sup> Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **508 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Kingman County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	507.8	\$43,024,561
Grain farming	174.9	\$46,268,948
All other crop farming	67.6	\$3,687,526
Support activities for agriculture and forestry	56.2	\$1,785,165
Animal production, except cattle and poultry and eggs	43.5	\$3,874,208
Farm machinery and equipment manufacturing	30.3	\$14,036,406
Real estate	18.8	\$1,632,916
Wholesale trade	12.8	\$2,600,701
Extraction of natural gas and crude petroleum	12.0	\$1,150,822
Monetary authorities and depository credit intermediation	11.3	\$2,141,551

The grain farming sector directly contributes approximately **\$46.3 million** to the Kingman County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output		
Sector	Total Employment	Total Output
Grain farming	174.9	\$46,268,948
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	507.8	\$43,024,561
Farm machinery and equipment manufacturing	30.3	\$14,036,406
Oilseed farming	11.0	\$8,174,694
Animal production, except cattle and poultry and eggs	43.5	\$3,874,208
All other crop farming	67.6	\$3,687,526
Wholesale trade	12.8	\$2,600,701
Monetary authorities and depository credit intermediation	11.3	\$2,141,551
Truck transportation	11.1	\$1,830,785
Support activities for agriculture and forestry	56.2	\$1,785,165

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Kingman County economy.

<b>All Agriculture, Food, and Food Processing Sectors</b>		
<b>Sector</b>	<b>Total Employment</b>	<b>Total Output</b>
Oilseed farming	11.0	\$8,174,694.20
Grain farming	174.9	\$46,268,948.37
Vegetable and melon farming	2.1	\$294,589.94
Fruit farming	1.0	\$64,549.04
Tree nut farming	0.0	\$10.87
Greenhouse, nursery, and floriculture production	3.9	\$384,149.77
Cotton farming	1.0	\$173,173.62
All other crop farming	67.6	\$3,687,526.29
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	507.8	\$43,024,561.01
Poultry and egg production	2.5	\$1,408,469.74
Animal production, except cattle and poultry and eggs	43.5	\$3,874,207.91
Commercial hunting and trapping	5.6	\$47,604.25
Bread and bakery product, except frozen, manufacturing	6.4	\$648,956.23
Frozen cakes and other pastries manufacturing	0.2	\$28,675.84
Farm machinery and equipment manufacturing	30.3	\$14,036,406.21
Veterinary services	5.7	\$523,473.88
Landscape and horticultural services	2.7	\$115,974.33

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Kingman County, the retail sector was omitted.